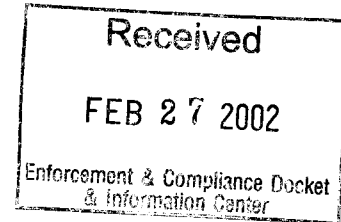




**BEFORE THE UNITED STATES**

**ENVIRONMENTAL PROTECTION AGENCY**

**Establishment of Electronic Reporting:  
Electronic Records; Proposed Rule  
66 Federal Register, Number. 170, 46162  
August 31, 2001**



**Docket Number EC-2000-007  
1200 Pennsylvania Avenue NW  
Washington, DC 20460**

**COMMENTS OF MICHAEL J. PENDERS**

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## **Executive Summary**

EPA should withdraw any new record keeping requirements for those who report electronically as set forth in Subpart C of the CROMERRR. They are contrary to the intent of the Government Paperwork Elimination Act (GPEA), unnecessary, and counterproductive from a government enforcement perspective. Making these new requirements a condition of electronic reporting is also ineffective as an anti-fraud measure because they would not extend to the many who keep electronic records now, but may choose not to report electronically because of the costs of changing their record systems to comply with Subpart C.

EPA has not established that electronic records raise the reliability and authenticity problems that would merit any new requirements. In fact, even without these requirements, there are many advantages to investigators and prosecutors today in using electronic records to identify and prove cases against culpable individuals compared to paper records, particularly with advances in computer forensics. If EPA were to consider litigation risks sufficient grounds for imposing additional requirements on electronic record keeping, contrary to the record and case law, EPA should still separate them from CROMERRR and propose any new record keeping requirements on a statute specific basis that would apply to all electronic record keeping, whether or not an entity reported electronically. Otherwise, if these record keeping provisions remain as part of CROMERRR, they will serve only to discourage electronic reporting without any benefit to EPA's Enforcement and Compliance program.

## **I. Introduction and Overview**

I appreciate the opportunity to offer these comments in my current capacity as President of Environmental Protection International (EPI), a firm that conducts investigations, audits, environmental enforcement training, and markets environmental management and security systems, including those involving continuous electronic monitoring, electronic record keeping, digitally reproduced satellite images, with defenses and encryption technologies available for environmental management information systems.<sup>1</sup> I also base these comments on my experience as Director of Legal Counsel at the United States Environmental Protection Agency's Office of Criminal Enforcement, Forensics, and Training and as a former trial prosecutor with experience in admitting as evidence records with hand written signatures as well as records based upon electronic communications in dozens of prosecutions of individuals for felony offenses. (I prosecuted a murder case in 1990 where a defendant asserted that the hand written signature on a statement was not his, repudiated the statement and his signature in their entirety, and where records kept electronically helped establish its authenticity.)

In 1999 I participated in the Symposium on Legal Implications of Environmental Electronic Reporting, listed in the Federal Register Notice Vol. 66 No.170 at 46166 (hereinafter FR) as one of the stakeholder processes relied upon in developing the CROMERRR proposal. I note that my comments now are wholly consistent with my presentation then as Special Counsel to the

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<sup>1</sup> The American Chemistry Council (ACC) has provided a grant to Environmental Protection International (EPI) for my time in preparing these comments. The ACC has not reviewed or exercised any editorial influence on these comments before filing.

Director of EPA's Office of Criminal Enforcement. At the 1999 Symposium, I submitted that EPA's overarching compliance and enforcement interests were much better served by moving forward to facilitate electronic reporting and record keeping as broadly as possible under the commercial practices for electronic record keeping and signature that prevailed at that time. I cited the experience of the Securities and Exchange Commission (SEC) with electronic filing and argued that keeping the barriers to electronic reporting as low as possible was consistent with law such as the Government Paperwork and Elimination Act (GPEA) and express administration policy. Removing real and perceived obstacles to electronic reporting and record keeping would improve the quantity and quality of data that EPA could use for strategic compliance and enforcement purposes. In particular, more electronic reporting, when linked with information from other sources, could make dramatic improvements in EPA's ability to comprehend what is reported and take appropriate action to protect the public and the environment in a time frame not possible with paper submissions.

I recommended strongly then that EPA go forward, as soon as possible, with a minimal and generic version of the CROMERRR, without additional record keeping requirements for those who report electronically. This recommendation was based exclusively on the merits of the impacts of electronic reporting and record keeping on EPA's enforcement program, after a full consideration of the litigation risks that were considered in detail at that symposium.

This recommendation, and that of other prosecutors and former prosecutors with trial experience at that forum, did not take into account the costs to regulated entities of complying with new

record keeping requirements for electronic reporting, in part, because additional record keeping requirements were not considered necessary, or within the scope of a proposed rule to facilitate electronic reporting at that time, which focused more on signature process and technology. Nevertheless, even assuming minimal costs for imposing new record keeping requirements, such measures were not necessary from a criminal enforcement perspective, considering how the law and rules of evidence had continually evolved to accept electronically transmitted records since the days of the telegraph. Indeed, there were certain advantages of electronic records (compared to paper forms with hand written signatures) in detecting and producing evidence as to when, where, and how someone made a signature, if the authenticity of a signature is challenged. Also, recent advances in the government's computer forensics capabilities, including at the Computer Forensics Laboratory at the National Enforcement Investigations Center (a part of EPA's Office of Criminal Enforcement, Forensics, and Training) convinced me that the advantages to the government in conducting investigations using electronic records far outweighed any litigation risks, even without any new electronic record keeping requirements.<sup>2</sup>

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<sup>2</sup> The opinion expressed in this paragraph that new electronic record keeping measures were not necessary was my own at that time, and is more strongly held now that Subpart C has been proposed in connection with a rule intended to facilitate the implementation of the GPEA, and would impose significant costs on industry, small businesses, and states as a condition of electronic reporting and record keeping. This view may or may not reflect the current view of the Office of Criminal Enforcement at EPA, but is shared by many prosecutors and former prosecutors on the state, local, and federal levels with experience in computer forensics, and admitting electronic records into evidence on a daily basis. If EPA considers the potential litigation risks sufficient grounds for imposing these costly requirements on electronic record reporting, EPA should withdraw the Subpart C proposal, and convene a forum to address this issue with prosecutors from all levels of government, other federal agencies, ECOS, NGA, and NAAG as well as computer forensics experts, then consider re-proposing any additional electronic record keeping requirements on a statute specific basis, with full notice, that would apply to all electronic record keeping, whether or not an entity reported electronically. Otherwise, if these record keeping provisions remain as part of CROMERRR, they would not apply to the many who keep electronic records, but send reports on paper. This result is inconsistent with the GPEA, imposes costly burdens only on those who report electronically, would not be effective as an anti-fraud measure, and would compromise aspects of EPA's overall enforcement and compliance mission.

## **II. Discussion**

### **A. EPA Has Not Established That Electronic Records and Reports Raise the Reliability and Authenticity Problems that Would Merit the New Record Keeping Requirements.**

Based upon the comments in the record as of February 25<sup>th</sup>, 2002, it is clear that the costs to regulated entities to comply with the electronic record keeping requirements of the CROMERRR Subpart C proposal are so significant that they will discourage electronic reporting in ways which are inconsistent with the GPEA, and limit the EPA's ability to make full use of electronic data for important compliance and enforcement functions. At the 1999 forum, there was nothing like these cost estimates on the table to consider the impact of the electronic filing and signature methods considered, let alone new electronic record keeping requirements. As EPA acknowledges in the preamble, additional electronic record keeping requirements are not necessary for EPA to bring an enforcement action based on an electronic submission and record keeping (FR 46169). The substantial costs of complying with these requirements, which have become clear in recent months, provide all the more reason to withdraw Subpart C from the CROMERRR proposal, and consider any additional measures for electric record keeping apart from electronic reporting.

EPA should not, and does not have to, propose any new requirements for electronic record keeping as part of CROMERRR in order to comply with the GPEA. Doing so before actual problems in detecting, investigating, and proving fraud with electronic records has been

established is not prudent nor practical, let alone sufficient justification to impose significant costs on industry, states, and small businesses that will discourage electronic reporting. Should concerns with detecting and prosecuting fraud with electronic record keeping become manifest, then additional requirements for electronic record keeping should be considered, and with reference to the specific technology and record keeping process that caused any problems with proof against individuals. Only then can a meaningful cost/benefit and feasibility analysis be conducted. So far, there is nothing in the record or in the case law to warrant these measures.

In fact, computer forensics has advanced with the pace of new technologies and offers advantages to the government in investigating cases involving electronic record keeping. There is much additional evidence for prosecutors to establish authenticity of electronic records that is not generally available with paper. Specifically, electronic records capture data relevant to when, where, and how data entries are made.

Often this type of computer generated evidence is more difficult to dispute than repudiating a paper report or submission that does not record such information, in part, because of the computer's objectivity in recording these facts. There are far fewer people who could potentially manipulate these processes to commit fraud than those who are likely to get caught because they are unaware of all the information that a computer records that can be used as evidence against them. Even those with the special skills required to manipulate computer data leave trails that can be used against them with current computer forensics techniques.

A fair cost/benefit analysis regarding litigation risk from electronic reporting and record keeping must also consider the advantages of electronic records compared to the litigation risks using paper documents. Otherwise, the search for perfecting a future chain of evidence for prosecutors in an electronic world, without fully considering costs and technical feasibility, may be the enemy of moving forward with advances that are much better than current paper reports and record keeping practices in detecting, deterring, and proving fraud. To the extent that these additional record keeping requirements would discourage entities from electronic reporting, and the comments in the record indicate that the costs are a significant disincentive, they will actually slow down and limit the progress of EPA's enforcement program in using data better to assure compliance and deter fraud.

**B. EPA Should Be Program Specific and Reporting Medium Neutral in Requiring Any Additional Requirement for Electronic Records or the Agency will Discourage Electronic Reporting, Impose Costs much too Broadly Without Real Effect on Fraud.**

Even should proof problems with electronic record keeping emerge, clearly they should not be addressed in a rule designed to facilitate electronic reporting. Rather, additional electronic record keeping requirements and audit trails will need to be considered in the context of the record keeping and audit requirements set forth in the regulations under specific statutes. Any new record keeping requirements must apply whether or not an entity chooses to report electronically. Otherwise, these requirements would have no effect on those who would commit fraud, using electronic records, but submit paper reports based upon these fraudulent records. They would

only impose unwarranted costs on those who try to comply and would like to report electronically.

An effective cost benefit analysis of new record keeping requirements can only proceed on a program specific basis. A program specific approach would also better address any fraud concerns that may emerge by taking into account the most relevant software and electronic record keeping systems for that statute. For example, EPA is addressing the Hazardous Waste Manifest in a separate electronic reporting rule, implicitly acknowledging that different security measures are necessary depending upon the gravity and consequences of the program at hand. (FR 46167). EPA has set the security bar too high for the relatively mundane and generic tasks of all electronic record keeping contemplated under this proposed rule.

Another advantage to a program specific approach is that certain anti-fraud measures may be built into the software and the data exchange process of the receiving system infrastructure of that program. This is essentially the approach of the SEC. The software that entities use for filing electronically with the SEC's Electronic Data Gathering Analysis and Retrieval system (EDGAR) may be downloaded from the EDGAR web site. There are no special record keeping requirements imposed as a condition of electronic filing with the SEC, and the secrecy and security concerns attendant to these filings are paramount.

### **C. Important EPA Criminal Enforcement and Homeland Security Objectives Favor Keeping the Barriers for Electronic Reporting Low.**

From a broad criminal enforcement perspective, which requires first the capacity to detect and investigate potential criminal violations long before individuals or corporations may be subject to prosecution, having greater access to as much relevant data in electronic form as soon as possible is more important than attempting to address future and speculative potential for fraud in the context of the CROMERRR rule itself. After all, from the days of the first telegraphs, the law and the rules of evidence have adapted to admit business records based upon telecommunications, **after** those forms of electronic communication became common place. Prosecutors have adapted as well and have been able to use the additional information recorded by virtue of electronic transmissions to establish the authenticity of a contested communication in ways that are not possible when a signed paper document is contested by a defendant. This happens hundreds of times a day in court rooms across the country.

Ironically, if new record keeping requirements discourage electronic reporting and further delays EPA's ability to receive and manage its data in electronic form, these requirements, though well intended, would limit EPA's ability to fulfill its enforcement and compliance mission in an information age. Receiving more data electronically, and comparing it with other data at EPA, and information recorded by other federal and state agencies, would allow EPA to detect and respond to a whole array of potential violations and threats that now go undetected, or detected months later, if and when paper reports are read, interpreted, shared, and compared with other sets of

data. Under current practices, often this is too late for an effective investigation, particularly if it involves a criminal enterprise. From a criminal investigative and security perspective, it is critical to be able to integrate information from different agencies in real time in electronic form to be able to detect illegal shipments of wastes, chemicals, explosives, and other hazardous materials in a time frame consistent preventing environmental harm, and apprehending the criminals or terrorists associated with these shipments.<sup>3</sup> Encumbering electronic reporting with additional record keeping requirements or other unwarranted restrictions would delay the process and limit the amount of information that EPA and other law enforcement agencies have access to in electronic form. .

Having as much data in electronic form as soon as possible would enable EPA's enforcement program to detect dozens of violations for every case that may present a litigation risk. The new imperatives (and Bush Administration's homeland security policies) of integrating interagency enforcement and compliance information to detect serious violations of law outweighs any litigation risk (which has not been established) in the small per cent of criminal cases that actually proceed to trial. It is a smaller per cent still where the authenticity of a signature or report is challenged, and is a significant to the government's case. Again, even in these cases, reports and records kept electronically offer advantages to prosecutors.

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<sup>3</sup> For a more extended analysis of why removing unnecessary barriers to electronic reporting is important from an international law enforcement and homeland security perspective, see "Ecoterror: Rethinking Environmental Security after September 11<sup>th</sup>" in the ABA Natural Resources and Environment Journal Volume 16, Number 3, Winter 2002, also at [www.abanet.org/environ/pubs/nre/specissue/home.html](http://www.abanet.org/environ/pubs/nre/specissue/home.html)

**D. EPA Should Not Require Burdensome Regulatory Anti-Fraud Provisions Absent a Showing of Necessity.**

To date there is no showing of necessity to justify the imposition of the burdensome anti-fraud provisions contemplated by CROMERRR. Electronic records are as admissible as paper records. Authentication will always be an evidentiary concern as it is with paper records. Instead of handwriting experts, computer forensic experts will be used in authentication. Moreover, EPA acknowledges that the "failure to satisfy these [anti-fraud] requirements will not preclude EPA from bringing an enforcement action based on the submission." (FR 46169)

As Jim Whitter, a Policy Analyst for the National Governors' Association Center for Best Practices, wrote following the 1999 Symposium on Legal Implications of Environmental Reporting:

The risk of losing criminal prosecutions will still exist. To eliminate it, an agency must either forgo electronic reporting or require parallel paper submissions. For those willing to accept a degree of risk, it may be best to begin with a simple system that produces reliable data, adding layers of complexity only as justified by specific court cases. In general, states only proceed with criminal prosecutions when they have overwhelming evidence of wrongdoing and feel that the risk of losing cases due to signature issues is small. This risk is somewhat controlled by the fact that electronic reporting produces better quality data that is available faster, enhancing the other evidence in the case.

(The Environmental Law Institute Forum, September/October, at page 53)

The EPA should follow the lead of Pennsylvania and the Uniform Electronic Transactions Act of 1999 by refraining from imposing a burdensome regulatory framework regarding security provisions of web-based electronic reporting. The Pennsylvania approach better embodies the

stated intent of EPA's proposed CROMERRR rule which proposes "to abandon any attempt to use regulations or formal policies to place technology-specific or *procedural requirements* on regulated entities submitting electronic documents." (emphasis added) (FR 46165)

The Pennsylvania legislature adopted a two pronged standard of good faith reliance and commercial reasonableness for attributions of Records and Signature found in Ch. 7 of the Uniform Electronic Transactions Act of 1999. The Pennsylvania Department of Environment Protection employs this two pronged test in its web-based electronic reporting program. § 702 of The Uniform Electronic Transactions Act provides that in the absence of a statute or regulation, the procedure will attribute an electronic record to a person identified by the security procedure if (1) it is commercially reasonable and (2) reliable upon in good faith. § 703 provides that commercial reasonableness of a security procedure is to be determined by a court in light of the purposes of the procedure and the commercial circumstances at the time.

**E. The Proposed Electronic Reporting Provisions Should Receive Additional Public Input, particularly from State Agencies and Small Businesses.**

In addition to withdrawing the record keeping requirements in Subpart C, EPA should re-propose the generic electronic reporting and signature provisions, in particular to get additional information about what is currently working for state agencies. Many states have or will soon adopt mandatory electronic reporting for environmental programs, and it is important that the EPA's electronic record keeping and reporting rules take account of these programs, and not

preempt them, or imply that they are insufficient, without compelling reasons. EPA should review other approaches to reporting and signature that are currently implemented by other agencies, such as the SEC EDGAR model discussed above, and consider how those methods might best apply to environmental records, and certainly not create a record that these methods are unreliable as a matter of policy.

While signatures and records are now routinely admitted into evidence under commercial reasonableness standards, EPA's laudable attempt to identify best practices in these areas, should not be set forth as requirements in the CROMERRR. Otherwise, defendants will inevitably argue that signatures or records not following the requirements that EPA has set forth should not be admitted as evidence against them. Courts may consider what EPA deems a reliable record or signature in ruling on this issue. The CROMERRR as currently constituted would give support to defense attorneys who will argue that certain electronic records are not reliable enough to be admitted as evidence unless the records are kept under the requirements that EPA sets forth.. EPA should take additional steps to avoid this interpretation. At a minimum, EPA should withdraw the Subpart C requirements, and re-propose the signature and reporting provisions taking this into account, as well as the comments of several states and small business representatives.

### **III. Conclusion**

Based upon the foregoing, I respectfully submit that EPA should re-propose a streamlined version of CROMERRR, without new record keeping requirements for those who choose to report electronically, in a manner designed to facilitate as much electronic reporting as soon as possible.

**Michael J. Penders**

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